REMARKS

Applicants, by the amendments presented above, have made a concerted effort to present claims which more clearly define over the prior art of record, and thus to place this case in condition for allowance.

Claims 1, 2, 15-17, 19, 20, 33 and 36 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over United States Patent No. 6,349,722 to Gradon. Claims 3-5, 10, 21-28, 34 and 35 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Gradon in view of United States Patent No. 5,558,084 to Daniell et al. Claims 6-9 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Gradon in view of United States Patent No. 3,789,190 to Orosy et al. Claims 11-14 and 29-33 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Gradon in view of United States Patent No. 6,050,260 to Daniell et al. Reconsideration of these rejections in view of the amendments and the remarks made herein is requested.

Independent claim 1 has been amended to specify "a conduit heater power monitor providing an output indicative of the input power to said conduit heater" and "(a) monitor said input power supplied to said conduit heater and to determine a parameter indicative of the resistance or temperature of said conduit heater or the flow rate through said conduit based upon said input power". Therefore, the improvement embodied in the present invention as specified in claim 1 relates to determining the flow rate or temperature within the conduit of flow or the resistance of the conduit heater, from the power used by the conduit heater. None of the prior art references have any disclosure of monitoring power drawn by the conduit heater element and in fact include no apparatus for doing so. Therefore, Applicant submits that it is unclear from the Examiner's comments how such data could be collected. Typically, prior art conduit heaters will be energized at a set voltage level with the

assumption that the outlet temperature of the humidifier will be at a set voltage level and therefore giving an approximate range of outlet temperatures for known flow rates.

In other prior art devices, the patient end includes a temperature sensor then it is close loop controlled to achieve a given delivery temperature. In neither case would there be any need to monitor the power drawn by the conduit heater. Claim 1 has been amended to explicitly require a conduit heater input power monitor to clarify this difference from the prior art.

Therefore, Applicant submits that the prior art does not render obvious the invention specified in amended claim 1. Reconsideration and allowance of amended claim 1 is requested.

In addition, claim 1 and independent claims 19 and 36 specify "open loop" control. Applicant reiterates its previous argument that the prior art relates to "closed loop or feedback control" in order to achieve a temperature within the conduit. The definition of closed loop control in this case is that a temperature sensor is provided within the conduit. The conduit temperature is therefore able to be used in a negative feedback loop to achieve a desired set point temperature at the patient end. In the present invention, a conduit sensor, i.e. a sensor within the conduit which connects to the patient, is not contemplated. Such open loop control as proposed in the present invention is not disclosed or suggested by the cited prior art. The apparatus as claimed in claims 1, 19 and 36 avoids the need for a conduit sensor while still achieving the advantage of such.

Therefore, Applicant submits that the prior art does not render obvious the invention specified in claims 1, 19 and 36. Reconsideration and allowance of claims 1, 19 and 36 is requested.

Applicant also request reconsideration and allowance of dependent claims 2-17 and

20-35 are dependent upon claims which Applicant submits is allowable. Reconsideration and allowance of claims 2-17 and 20-35 is requested.

In view of the above Amendments and Remarks, Applicant respectfully submits that the claims of the application are allowable over the rejections of the Examiner. Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact one of the undersigned attorneys at (312) 704-1890.

Respectfully submitted,

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